Cement Technology: Volume 3: 1972

Index

A

Abrasive-resistant liners 165
Agitator pump, submersible 116
Air compressor 239
Air handling equipment 154
Air pollution control 155, 243
Air separators, Sturtevant 163
Air temperature, control of 180
Annular synochronous motor 14
Automatic Blainmeter 79, 164, 194
Automatic sampler 197

B

Barium sulpho-aluminate 160
Batch grinding tests 97
Bearing failure 84
Black cement 120
Blender, spherical 204
Blainmeter, automatic 79, 164, 194
Bucket excavator 207

C

Calcium sulphate hemihydrate 67
Cembureau General Assembly, London 157
Cement, black 120
Cement cooling 165
Cement, high strength 160
Cement, homogeneity of 234
Cement industry, Turkey 76
Cement kiln operations 71
Cement, oilwell 120
Cement pastes, hydrated Portland 12
Cement production, 1970 76
Cement, production of 38
Cement production, USSR 120
Cement sack production 243
Cement, white 120
Cements, high alkali 38
Ceramic lining 46
Ciments d'Obourg, Belgium 163
Clinker, 17, 13
Clinker, cooling of 45
Clinker cooling, rate of 47
Clinker grinding 127
Clinker milling 97
Clinker pre-crushing 131
Clinker store 212
Closed circuit grinding 169
Coal dust firing 62
Cooler, grate 45
Cooler grate pressure 141
Cooler, planetary 45
Cooler, satellite 45
Cooler speed 139
Cooler, Unax 46
Coolers 71
Coolers, grate 136
Cone crushers 132
Contact thermocouple 32
Control circuits, cement kilns 88
Control panels 217
Control rooms 216
Controls, pressure 136
Controls, temperature 136
Conveyor belt cleaner 203
Conveyor belt, movable 208
Conveyors, troughed belt 118
Conveyor, twin-belt 239
Compound crusher 29
Compound impact crusher 78
Computer optimization 80
Compaction pressure 7
Crusher, compound 29
Crusher, double roll 124
Crusher, Gyradisc 131
Crusher, mobile 126
Crushers, cone 132
Crushers, hammer 30
Crushing, primary 30
Crushing and screening plant, mobile 78
Cyclones 230

D

Decorative cements 201
Density, measurement of 8
Digger loader 154
Discharge valve, hopper 155
Double roll crusher 124
Dry feeders 79
Dust and grit control 188
Dust collection 175
Dust filter, insertable 190
Dust mask, protective 40
Dust removal 201
Dust removal equipment 192
Dump trucks 244

E

Eerste Nederlandse Cement Industrie 171
Electromagnetic feeders 200
Electro-osmosis 120
Electrostatic dust precipitator 229
Elevator, heavy duty 204
Ettringite 185
Excavators, bucket wheel 39
Extraction fans 231

F

Flowmeters, unbreakable 117
Fluxopacker 213
Fluxo pump 214
Fly ash 160

G

Gas burners 159
Gas cleaning, clinker cooler 189
Gas cleaning, kiln and preheater 189
Gas firing 66
Gas turbine heating unit 155
Gearless cement mill drives 14
German Research Institute 130
Grate cooler 45
Grate cooler, Fuller 109
Grate coolers 136
Grate coolers, automatic control 180
Grate feed 136
Grate plates 142
Grain size distribution 97
Grate cooler, Folex 210
Grinding 120
Grinding, closed circuit 169
Grinding, open circuit 169
Grinding aid, sodium acetate 97
Grinding mill, repairs 106
Gyradisc crusher 131

H

Hammer crushers 30
Heating unit, gas turbine 155
Heavy duty elevator 204
Helium comparison pycnometer 6
High-strength cement 160
Homogenisation 17, 27, 30
Homogenising, pneumatic 29
Hopper discharge valve 155
Hopper switch 117
Hydrated Portland cement 5
Hydrated Portland cement, density of 5
Hydrations reactions 146

I

Infrared moisture analyser 156
Infrared scanning system 199
Insertable dust filter 190, 243
Integral weighing feeder 195

International seminar, Copenhagen 115

K

Kiln dust 201
Kiln firing systems 62
Kiln gases, reactions of 93
Kiln linings 120
Kiln roller journals 83

L

Lining, ceramic 46
Lining material 112

M

Märker Zementwerk, Harburg 15
Measuring and proportioning devices 194
Mills, drying and grinding 16
Mixed firing 66
Moisture analyser, infrared 156
Moisture control 203
MPS roller mill 52
Multi-way diverter 240

N

New plant and products 39, 78, 115, 154, 203, 238
News and reviews 80, 115, 158, 200, 243
New sintering process 187
Northfleet extensions 115

O

Oil firing 62
Open circuit grinding 169

P

Particle research 158
Photorelays 240
Planetary cooler 45
Pneumatic homogenising 29
Polyethylene 112
Pore volume 7
Portland cement, analysis of 224
Portland cement, hydrated 5
Portland cement, testing reference 80
Precipitators vibrators 40
Preheaters 71
Pressure controls 136
Pressure, primary air 36
Primary air pressure 36
Primary air temperature 36
Primary crushing 30
Process control 58
Protective mask 40
Pycnometer, Weld's 6
Pycnometry 6
Pyrometer, mounting of 35
Pyrometer, photoelectric 33
Pyrometer, radiation 139
Pyrometer, total radiation 33
Pyzel process 74

R

Radiation pyrometer 139
Raw materials, extraction of 15
Raw meal 17
Raw meal preparation 172
Raw mix 27
Research at Wexham Springs 158
Ring formation 93, 143
Rings 144
Rings, ash 96
Rings, removal of 95
Ring removal, water jet 95
Roll crushers, slugger 123
Rørdal Cement Works 207
Rotary kilns, autolubrication 116
Rotary kiln, temperature of 32
Rotary lathe, portable 83
Rotation viscometer, Couette 64

S

Satellite cooler 45
Scanning system, infrared 199
Secondary air flow 137
Secondary air temperature 138
Semi-bulk handling system 203
Separators, CV type 213
Silo installations 29
Silos 17
Silo weighing system 78
Slag cement, rapid hardening 160
Slip detector, belt conveyor 117
Slurry filtration 27
Slurry mill 209
Slurry preparation 173
Slurry transporting 160
SO_3, rapid determination of 160
Soviet journals, extracts 38, 75, 120, 160, 201, 246
Spherical blender 204
Spurrite 144
Storage and loading 18
Strength properties 49
Strontium and barium substitution 186
Sturtevant air separators 163
Submersible pump 238
Sulphate-resisting cement, metric standard 115
Suspension preheater, Fuller 110
Suspension preheater kilns 143

T

Tachoswitches 154
Techniques, diffractometry 59
Temperature controls 136
Temperature, primary air 36
Temperature, sintering zone 34
Thermocouple, contact 32
Thermometer, infrared 40
Tricalcium aluminate 19, 146
Tricalcium aluminate pastes, properties of 22
Tromp's curves 168
Trunnion journal 106
Twin-belt conveyor 239

U

Unax cooler 46

V

Valve sack applicator 238
Vibratory conveyors, hydraulic 39
Vibratory sieve 239
Viscosity, oil 64

W

Waste gas 88
White cement 120
World Cement Directory 178
World Cement Production, 1971 159, 44

X

X-ray diffractometer 55

Authors

Aldridge, L. P. 224
Bensted, J. 67, 185
Chatterji, S. 19, 146
Chen, N. N. 106
Christensen, B. 207
Collins, P. 123
Eardley, R. P. 224
Enkegaard, T. 45
Feldman, R. F. 5
Ghigi, G. 97
Gupta, P. 19, 146
Hewett-Emmett, A. 55
Horn, G. 112
Hotchkiss, J. D. 83
Jeffery, J. W. 19, 146
Kennerley, R. A. 224
Kozlowski, A. 143
Lees, T. P. 234
Nutter, J. C. 55
Prakash Varma, S. 67, 185
Schauer, S. 52
Schrevens, J. 163
Waddington, J. N. 188
Welch, J. J. 234